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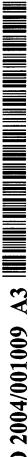
with international search report

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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: APO-2 LIGAND/TRAIL VARIANTS AND USES THEREOF

(57) Abstract: The disclosure provides Apo-2 ligand variant polypeptides. Methods of making and chemically modifying Apo-2 ligand variant polypeptides are also provided. In addition, formulations of Apo-2 ligand variant polypeptides are provided. In addition, therapeutic methods for using Apo-2 ligand variant polypeptides are provided.





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IPC(7)	: A61K 38/19; C12N 15/19; C07K 14/525			
*US CL : 424/85.1; 514/2; 435/69.5, 172.3, 252.3, 320.1; 536;23.1, 23.5, 24.31 According to International Patent Classification (IPC) or to both national classification and IPC				
	DS SEARCHED	national classification and if C		
Minimum documentation searched (classification system followed by classification symbols) U.S.: 424/85.1; 514/2; 435/69.5, 172.3, 252.3, 320.1; 536;23.1, 23.5, 24.31				
Documentation	on searched other than minimum documentation to the	ne extent that such documents are include	d in the fields searched	
	ata base consulted during the international search (na continuation Sheet	me of data base and, where practicable,	search terms used)	
C. DOC	UMENTS CONSIDERED TO BE RELEVANT			
Category *	Citation of document, with indication, where a	ppropriate, of the relevant passages	Relevant to claim No.	
Y	WO 01/00832 (GENENTECH, INC.) 04 January 2		1-30 and 32	
A	US 6,284,236 B1 (WILEY et al.) 04 September 20	001 (04.09.2001)	1-30 and 32	
E, X	WO 03/029420 A2 (GENENTECH, INC.) 10 Apr	il 2003 (10.04.2003), Table 1	1-30 and 32	
Further	documents are listed in the continuation of Box C.	See patent family annex.		
"A" document	pecial categories of cited documents: defining the general state of the art which is not considered to	"T" later document published after the in priority date and not in conflict with understand the principle or theory w	the application but cited to	
-	icular relevance plication or patent published on or after the international filing	"X" document of particular relevance; the considered novel or cannot be consisted when the document is taken along the consisted when the document is taken along the consistency of the	iered to involve an inventive	
	which may throw doubts on priority claim(s) or which is cited sh the publication date of another citation or other special reason iled)	"Y" document of particular relevance; the considered to involve an inventive st combined with one or more other su combination being obvious to a pers	tep when the document is th documents, such	
	referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent		
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Mai Con	1 Stop PCT, Attn: ISA/US nmissioner for Patents . Box 1450	Rachel B. Kapust	allens) to	
Alex Facsimile No	xandria, Virginia 22313-1450 o. (703) 305-3230	Telephone No. (703) 308-0196		
orm PCT/ISA	\/210 (second sheet) (July 1998)		1/	



Interna	application No.
PCT/US03/1	19750

Box I Observations where certain claims were found unsearchable (Continuation of Item 1 of first sheet)			
This international report has not been established in respect of certain claims u	nder Article 17(2)(a) for the following reasons:		
Claim Nos.: because they relate to subject matter not required to be searched ,	by this Authority, namely:		
Claim Nos.: because they relate to parts of the international application that desuch an extent that no meaningful international search can be car	to not comply with the prescribed requirements to ried out, specifically:		
3. Claim Nos.: 31 and 33-38 because they are dependent claims and are not drafted in accordance 6.4(a).	ance with the second and third sentences of Rule		
Box II Observations where unity of invention is lacking (Continuat	tion of Item 2 of first sheet)		
This International Searching Authority found multiple inventions in this interna-	ational application, as follows:		
 As all required additional search fees were timely paid by the approximate searchable claims. As all searchable claims could be searched without effort justifying payment of any additional fee. As only some of the required additional search fees were timely preport covers only those claims for which fees were paid, specific 	ng an additional fee, this Authority did not invite		
4. No required additional search fees were timely paid by the applic is restricted to the invention first mentioned in the claims; it is concern the claims is restricted to the invention first mentioned in the claims; it is concern to the claims in the claims in the claims. Remark on Protest The additional search fees were accompanied by No protest accompanied the payment of additional search.	overed by claims Nos.: by the applicant's protest.		

Form PCT/ISA/210 (continuation of first sheet(1)) (July 1998)

INTERNATIONA SEARCH REPORT	PCT/US0

Continuation of B. FIELDS SEARCHED Item 3: EAST, MEDLINE, CAPLUS, SCISEARCH, BIOSIS, USPATFULL, PCTFULL search terms: TNFS10, TRAIL, APO2L, APO2 ligand, variant, polymorphism, mutant, mutation, substitution
search terms: TNFS10, TRAIL, APO2L, APO2 ligand, variant, polymorphism, mutant, mutation, substitution
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